



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,353	12/27/2006	Naoki Kanada	2565-0300PUS1	9553
2292 7590 07/02/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
DEAN, JR, JOSEPH E				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
07/02/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/591,353

Applicant(s)

KANADA ET AL.

Examiner

JOSEPH DEAN, JR

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3, 6-8 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2, 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 3, 6-8 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 05/26/10 has been entered.
2. The indicated allowability of claim 2,3,4,5, 6-8 and 11-16, claims 3,6-8 and 11-16 are withdrawn in view of the newly discovered reference(s) to Ishigaki (4953178) and Keskitalo et al. (US5930684). Rejections based on the newly cited reference(s) and other references cited in previous office action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green (US 5,926,133) further in view of Ishigaki (US4953178)

Per claim 3, Green discloses a mobile station of which communicates with a base station by using a direct sequence system comprising (Fig 5, Rover 16;

Art Unit: 2617

col.6 lines 34-39): a special call part configured to request initiation of a special call (col.3 lines 64-66; col.15, lines 9-12); and a mobile station side transmission part configured to(Fig 5, Rover 16), in response to a request from the special call part (col.3 line 66, col. 6 lines 61-63), generate a special radio wave signal of high power spectrum density and transmit it to the base station(col.6 lines 61-63), wherein the mobile station side transmission part generates the special radio wave signal of high power spectrum density (col. 6, lines 61-63), but fails to disclose wherein the mobile station side transmission part includes a special code generation part to generate a special code of a direct-current component, and a spread modulation part to perform spread modulation of an information signal by using the special code generated by the special code generation part, and generating the special radio wave by performing spread modulation of the information signal by using the special code of the direct-current component.

However, Ishigaki discloses wherein the mobile station side transmission part includes a special code generation part to generate a special code of a direct-current component (col.8 lines 30-68 and col.9 lines 1-25, **i.e. spread code has direct current**), and a spread modulation part to perform spread modulation of an information signal by using the special code generated by the special code generation part (col. 6 lines 10-28, Fig 3a & 3b), and generating the special radio wave by performing spread modulation of the information signal by using the special code of the direct-current component (col.6 lines 10-28, col9. lines 48-67 and col. 10 lines 1-20, Fig 3a, 3b, 4 and 6).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Green, provides a system for locating communication devices including high power level devices and Ishigaki, provides a spread spectrum communication system which includes a modulation unit in the transmission side for transmitting spread spectrum signal as a whole to produce the invention as claimed with a reasonable expectation tracking an accurate location for a communication device that request emergency services and capable of controlling spread signals even when stronger signals are present by utilizing direct current to prevent erroneous operation caused by interference signals.

Per claim 15, the combination discloses the mobile station of claim 3, wherein Green discloses the mobile station side transmission part performs communication by using the special radio wave signal until a session with the base station is established (col.6 lines 29-39 and 45-60).

Per claim 16, refer to same rationale as explained in claim 15.

5. Claims 6, 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over and Keskitalo et al. (US5930684) (hereinafter Keskitalo) and Green, and further in view of McCorkle et al (US20030161411) (hereinafter McCorkle).

Per claim 6, Keskitalo discloses a mobile station which communicates with a base station by using a direct sequence system, comprising:

Art Unit: 2617

switch from a mode of generating a normal spread modulation signal for the direct sequence system (i.e. **CDMA**) to a mode of generating a special radio wave signal of higher power spectrum density than the normal spread modulation signal (col.1 lines 66-67 and col.2 lines 1-16, i.e. **base station transmits power control information messages to the terminals, which may adjust their transmit power on the basis of the power control information messages from the base station, calls with higher priority use a higher transmit power than is allowed for calls with lower priority. The mobile station signals to base stations to the base station a value differing from the real value of the transmit power it uses in the call with higher priority** (col.2 lines 17-24), and transmit the special radio wave signal to the base station (col.2 line 17-24), wherein the mobile station side transmission part generates the special radio wave signal of same power as power used in generating the normal spread modulation signal for the direct sequence system (col. 3 lines 45-55)

Green discloses a special call part configured to request initiation of a special call (col.3 lines 64-66; col.15, lines 9-12); and a mobile station side transmission part configured to (Fig 5, Rover 16), in response to the request from the special call part (col.3 line 66, col. 6 lines 61-63), McCorkie discloses a narrower band than a band used in generating the normal spread modulation signal for the direct sequence system (paragraph 0210, fig 10, i.e. **narrower band used for TV and other communication, versus spread spectrum and ultra wide band**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Keskitalo which provides adjusting power for higher

Art Unit: 2617

priority terminals or signals than lower priority terminals, Green provides a system for locating communication devices including high power level devices and McCorkle, provides ultra wide bandwidth with low power spectral density but emphasizes the different bands such narrowband which has higher power density and ultra wide band with lower power density where signal spreads over larger area as a whole to produce the invention as claimed with a reasonable expectation of achieving overall efficiency by maintaining communication when higher priority call is receiving at base station and this special call requires a more power through narrower band or adjusting real power value higher than expected.

Per claim 7, refer to same rationale as explained in claim 6.

Per claim 12, refer to same rationale as explained in claim 7(primary reference inherently has this (the computer readable medium), i.e., given that the primary reference shows a process, the process would be implemented by a processor that requires a "computer readable medium", e.g., a RAM, to function, see fig 1, a mobile terminal).

6. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keskitalo and further in view of Raith et al. (US6826394) (hereinafter Raith).

Per claim 8, Keskitalo discloses a base station which communicates with a plurality of mobile stations by using a direct sequence system, comprising: a base station side reception part

configured to receive a normal spread modulation signal used in the direct sequence system and a special radio wave signal of high power spectrum density from the plurality of mobile stations, the special radio wave signal being generated of same power as power used in generating the normal spread modulation signal for the direct sequence system, and of a narrower band than a band used in generating the normal spread modulation signal for the direct sequence system (refer to claim 6 , however from base station perspective) Keskitalo discloses a detection part configured to detect whether the base station side reception part received the special radio wave signal (col.2 lines 1-24) switch modes of extracting information in response to the detection (col.2 lines 1-24, i.e. **detecting value differing from real value and base receiving data by transmitting power control command for adjusting power level**); Raith discloses a base station side transmission part configured to transmit an assignment signal for assigning a channel to a mobile station which had transmitted the special radio wave signal detected by the detection part. (col.5. lines 35-49, i.e. emergency flag)

Therefore, one skilled in the art would have found it obvious from the combined teachings of Keskitalo and Raith, provides emergency call handling functions that provided to emergency service centers as a whole to produce the invention as claimed with reasonable expectation of detecting higher power signals for continued connectivity via channel assignment for emergencies.

Per claim 13, refer to same rationale as explained in claim 8 (primary reference inherently has this (the computer readable medium), i.e., given that

the primary reference shows a process, the process would be implemented by a processor that requires a "computer readable medium", e.g., a RAM, to function, see fig 1, a mobile terminal)

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over and Keskitalo et al. (US5930684) (hereinafter Keskitalo) and Green McCorkle et al (US20030161411) (hereinafter McCorkle), and further in view of Raith.

Per claim 11, refer to same rationale as explained in claim 6 and 8.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Green, Ishigaki, Heeswyk et al. (US6298050) (hereinafter van Heeswyk) and in view of Levin et al. (US5654979) (hereinafter Levin)

Per claim 14, the combination discloses the mobile station of claim 3, but does not disclose further including a communication control part to restrict a bit rate of the information signal to be low when the mobile station side transmission part generates the special radio wave signal, in order to increase power spectrum density of the special radio wave signal by restricting the bit rate to be low.

However, van Heeswyk discloses further including a communication control part of the information signal to be low (col. 2 lines 5-12) when the mobile station side transmission part generates the special radio wave signal (col.2 lines 5-12), in order to increase power spectrum density of the special radio wave signal by restricting the bit rate to be low (col.2 lines 5-12).

Van Heeswyk fails to disclose to restrict a bit rate.

However, Levin discloses to restrict a bit rate (col. 6 lines 48-54)

Therefore, one skilled in the art would have found it obvious from the combined teachings of Green, Ishigaki and Van Heeswyk , provide a system for cancelling extra interference and Levin, provides a demodulation processor that despreads received signals as a whole to produce the invention as claimed with reasonable expectation of achieving connectivity with low voice activity under emergency situations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH DEAN, JR whose telephone number is (571)270-7116. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bost Dwayne can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOSEPH DEAN, JR/
Examiner, Art Unit 2617

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617